

Occupational asthma in cleaners

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Our experience at Sacré-Coeur

- From 1976 to 2016:
 - **42** workers referred for OA, exposed to various cleaning agents or solvents
 - Exposure usually to **multiple agents** (amines, quaternary ammonium, etc)
- **3 workers had confirmed OA**
 - Quaternary ammonium – cleaner (Immediate)
 - Enzymes – sterilisation (Dual)
 - Unknown – nurse in ER (Exposure to QA negative)
- 1 had possible OA – based on PEF monitoring & benefit of the doubt!

Negative investigation in cleaners

- **21** workers had evidence of **asthma** (PC₂₀ +)
 - All had a negative SIC in the lab (15) &/or at work (9)
 - 10 had subsequent negative monitoring of PEF & PC₂₀ at work
 - Reproduction of respiratory Sx in 17/22
 - Diagnosis of **Hyperventilation syndrome** in 6/22
 - **WEA diagnosed in 3/21**
 - Cough, throat irritation or rhinitis (3), headaches, dizziness, in the rest... without any evidence of airways inflammation or obstruction.

Negative investigation in cleaners

- **No evidence of asthma in 18 workers** (PC20 >16mg/ml)
 - All had a negative SIC in the lab (13) &/or at work (7)
 - Reproduction of respiratory Sx in 16/18
 - Diagnosis of **HVS** in 7/18
 - Throat irritation, rhinitis, cough, dizziness, lightheadness, fatigue... without any evidence of airways inflammation or obstruction.

In conclusion

- In our experience, **OA in cleaners is rare**, as well as WEA
- Many workers complain of respiratory symptoms, often nonspecific
 - more often related to “irritation” of the airways, without any evidence of airway inflammation or bronchospasm
 - Often associated with HVS
- The diagnosis of work-related asthma in cleaners should be confirmed objectively

Questions

- How can we explain the discrepancies between epidemiologic studies reporting high prevalence of work-related asthma and the low prevalence of objective evidence of asthma and work-related asthma?